

## PRESENTATION SCHEDULES

MONDAY, APRIL 6, 2026

### COLLEGE OF AGRICULTURE

#### GRADUATE SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

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9:00 AM	AGR-035	<b>TEACHERS' PERCEPTIONS OF USING VIRTUAL REALITY TO ENHANCE AGRICULTURAL EDUCATION</b> Brian Kibirige*. Agribusiness and Education, College of Agriculture. Advisor(s): John Ricketts
9:15 AM	AGR-018	<b>IDENTIFICATION AND MANAGEMENT OF CANKER DISEASES CAUSED BY BOTRYOSPHERA DOTHIDEA AND DIAPORTHE ERAS IN FLOWERING DOGWOOD (CORNUS FLORIDA)</b> Pratima Subedi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel, Dr. Christina Jennings, Dr. Cansu Oksel, Terri Simmons
9:30 AM	AGR-016	<b>FEEDING THE SOIL TO FEED THE CROP: APPLICATION OF COVER CROPS IN ORGANIC VEGETABLE PRODUCTION SYSTEMS</b> Sai Prakash Naroju*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Dilip Nandwani
9:45 AM	AGR-017	<b>GENOMIC INSIGHTS INTO PLANT GROWTH PROMOTION AND BIOCONTROL OF THE ENDOPHYTIC STRAIN BACILLUS AMYLOLIQUEFACIENS 143-EN04</b> Gift Maureen OBUNUKWU*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Margaret Mmbaga
10:00 AM	AGR-022	<b>INTEGRATING ECOLOGICAL CITIZENSHIP INTO THE THEORY OF PLANNED BEHAVIOR: EVIDENCE FROM LOCAL FOOD CONSUMPTION IN TENNESSEE</b> Santosh Kafle*, Stinson Parks. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Lap Tran, Prabodh Illukpitiya, Aditya Khanal, Chetan Sharma
10:30 AM	AGR-003	<b>COMPARATIVE GENOMICS OF INTERFERON GENE REPERTOIRES ACROSS SWINE BREEDS REVEALS DOMESTICATION-DRIVEN IMMUNOGENETIC DIVERSITY</b> Jiuyi Li*. Food and Animal Science, College of Agriculture. Advisor(s): Yonngming Sang
10:45 AM	AGR-020	<b>INFLUENCE OF TRANSPLANTING DEPTH ON GROWTH AND SURVIVAL OF FLORAL HEMP (CANNABIS SATIVA L.) UNDER SOUTHERN BLIGHT PRESSURE</b> Chiamaka Nnadi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Emmanuel Omondi
11:00 AM	AGR-026	<b>ON-FARM ASSESSMENT OF SOIL HEALTH IN DOMINANT ANNUAL CROPPING SYSTEM AND PERENNIAL FORAGE SYSTEM IN TENNESSEE.</b> Mukesh Chaudhary*, Pooja Chaudhari. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Krishna Bhandari, Dr. Jianwei LI, Dr. Resham Thapa, Dr. Philip Hinson
11:15 AM	AGR-023	<b>INTEGRATING PRECISION AGRICULTURE AND BIOSTIMULANTS: SENSOR-TRIGGERED APPLICATIONS IN KALE</b> Leah Reeves*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): ZaDarreyal Wiggins

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*\*Denotes Presenters*

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11:30 AM AGR-021 **INFLUENCE OF WINTER COVER CROP SPECIES AND VARIETIES ON RHIZOSPHERE FUNGAL COMMUNITY STRUCTURE REVEALED BY ITS AMPLICON SEQUENCING.**  
Laxmi Prasad Joshi\*. Agricultural Sciences and Engineering, College of Agriculture.  
Advisor(s): Matthew Blair

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**UNDERGRADUATE SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)**

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1:00 PM AGR-131 **SEED TRAIT VARIABILITY IN A GLOBAL MUNG BEAN GERMPLASM PANEL**  
Christian White\*, Josh Relyea. Agricultural Sciences and Engineering, College of Agriculture.  
Advisor(s): Matthew Blair

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1:15 PM AGR-124 **A 'MIXOMICS' PIPELINE MERGES METHYLOMICS AND TRANSCRIPTOMICS TO REVEAL NEW PLANT-PEPTIDE TARGETS**  
Kyla Hughes\*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):  
Sonali Roy, Rajni Parmar

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1:30 PM AGR-126 **CRISPR-Cas9 MEDIATED TARGETED MUTAGENESIS TO ASSESS THE FUNCTION OF MtBAK1 IN THE MEDICAGO TRUNCATULA**  
Shania Dean-Motley\*. Agricultural Sciences and Engineering, College of Agriculture.  
Advisor(s): Sonali Roy, Rajni Parmar

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1:45 PM AGR-125 **CONTINUED ASSESSMENT OF A HYBRID GRAVEL BED + TREE SYSTEM FOR URBAN STORMWATER MANAGEMENT**  
Sydney Wyche\*. Environmental Science, College of Agriculture. Advisor(s): Yujuan Chen

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2:15 PM AGR-130 **GREENING CITIES FROM THE GROUND UP: THE IMPACT OF URBAN SOIL MANAGEMENT PRACTICES ON SOIL PROPERTIES AND URBAN TREE GROWTH**  
Todd Stansberry\*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):  
Yujuan Chen, Diksha Tamang, Dr. De'Etra Young

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2:30 PM AGR-127 **CULTIVATING LEADERSHIP AND PROFESSIONAL GROWTH THROUGH ENGAGEMENT: THE IMPACT OF AGRICULTURAL AMBASSADOR PROGRAM AT TSU**  
Satoria North\*, Kaylan Banks. Agribusiness and Education, College of Agriculture.  
Advisor(s): Akua Adu-Gyamfi

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2:45 PM AGR-128 **DEVELOPING A COMMUNICATION PLATFORM TO PROMOTE RESILIENT TOMATO PRODUCTION THROUGH UNIVERSITY-SMALL FARM**  
Makiya Stephens\*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):  
Suping Zhou

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3:00 PM AGR-129 **DEVELOPING NUTRIENT INFORMATION PROFILES FOR TOMATOES PRODUCED UNDER DIFFERENT PRODUCTION SYSTEMS**  
Nylah Spivey\*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):  
Suping Zhou, Katrina Seaman

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*\*Denotes Presenters*

## PRESENTATION SCHEDULES

TUESDAY, APRIL 7, 2026

### COLLEGE OF ENGINEERING

#### GRADUATE SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

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9:00 AM	ENGR-050	<b>OPTIMIZATION OF ELECTROSPINNING PARAMETERS FOR HIGH-QUALITY PVDF NANOFIBER PRODUCTION FOR SENSORY AND ENERGY APPLICATIONS.</b> Ojiugo Ucheji*. Mechanical and Manufacturing Engineering, College of Engineering Technology and Computer Science. Advisor(s): Richard Mu, Mulugeta Wayu, Akira Ueda, Anthony Hmelo
9:15 AM	ENGR-051	<b>OPTIMIZING CONCENTRATION AND ELECTROSPINNING PARAMETERS FOR ENHANCED MORPHOLOGY OF ELECTROSPUN PVDF-TrFE (70:30, 75:25, 80:20) FIBERS</b> Joshua Adjei - Yeboah*, Sadiqa Akbar, Erin James. TIGER Institute, College of Engineering Technology and Computer Science. Advisor(s): Richard Mu, Axel Hoffmann, Hanna Terletska, Akira Ueda
9:30 AM	ENGR-056	<b>REAL-TIME HARDWARE-IN-THE-LOOP CONTROL OF A VIRTUAL POWER SYSTEM USING ONLINE REINFORCEMENT LEARNING WITH NOVEL BACKEND THREADED OPTIMIZATION TECHNIQUE</b> Richard Wiencek*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Sagnika Ghosh
9:45 AM	ENGR-059	<b>SIMULATION BASED EVALUATION OF DYNAMIC VEHICLE REROUTING AT URBAN RAIL CROSSINGS USING SUMO</b> Masanja Madalo*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
10:00 AM	ENGR-045	<b>FREIGHT OPERATIONAL PERFORMANCE ASSESSMENT AND OPTIMIZATION USING MICROSIMULATION-BASED AND ARTIFICIAL INTELLIGENCE DRIVEN METHODS</b> Erickson Senkondo*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
10:30 AM	ENGR-040	<b>A STAKEHOLDER-INFORMED ECONOMIC AND SUPPLY CHAIN IMPACT ANALYSIS OF AI-ENABLED FREIGHT LOGISTICS OPTIMIZATION</b> Afia Yeboah*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
10:45 AM	ENGR-060	<b>SPATIAL ANALYSIS TO IDENTIFY FREIGHT TRUCK CRASH HOTSPOTS IN TENNESSEE</b> Rheecha Sharma*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
11:00 AM	ENGR-054	<b>PHYSICS-EMBEDDED FEATURE LEARNING FOR AI IN MEDICAL IMAGING</b> Pulock Das*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Kamrul Das
11:15 AM	ENGR-058	<b>SECOM MALICIOUS ROUTING ATTACKS AND DEFENSE USING MACHINE LEARNING AND BLOCKCHAIN INTEGRITY ANCHORING</b> Samer Al Musawi*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Liang Hong, Kamrul Hasan

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*\*Denotes Presenters*

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11:30 AM ENGR-062 **THERMAL IMAGE PROCESSING WITH ARTIFICIAL INTELLIGENCE FOR GLUCOSE CONCENTRATION ESTIMATION**  
Parth Dineshbhai Pandya\*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Rassel Shazzad

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**MIXED SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)**

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1:00 PM ENGR-063 **THERMAL PERFORMANCE OPTIMIZATION OF NANO-ENHANCED PHASE CHANGE MATERIALS (NePCM) THERMAL STORAGE SYSTEM USING COMPUTATIONAL FLUID DYNAMICS TECHNIQUE**  
Mashiur Rahman\*, Maher Niger Prova. Mechanical and Manufacturing Engineering, College of Engineering Technology and Computer Science. Advisor(s): Aung Myat

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1:15 PM ENGR-047 **HIERARCHICAL FLOW DECOMPOSITION FOR TURNING MOVEMENT PREDICTION AT SIGNALIZED INTERSECTIONS**  
Md Atiqur Rahman Mallick\*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Kamrul Hasan, Pulock Das, Liang Hong, SM Shazzad

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1:30 PM ENGR-065 **UNIFYING ENVIRONMENTAL STRESS CRACKING AND MECHANO-SORPTIVE CREEP UNDER THE UMBRELLA OF MECHANO-SORPTIVE PHENOMENA**  
Yue Yan\*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Ranganathan Parthasarathy, Anil Misra, Paulette Spencer

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1:45 PM ENGR-132 **MEASURING EFFECTS OF PHYSICAL INPUT MODALITY ON PLAYER PRESENCE IN A CAVE XR ENVIRONMENT**  
Egypt Garrett\*, Aimee Rollins\*, Jada Anthony\*. Computer Science, College of Engineering Technology and Computer Science. Advisor(s): Caleb Vatrál

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2:00 PM ENGR-133 **OPTIMIZING CONCENTRATION AND ELECTROSPINNING PARAMETERS FOR ENHANCED MORPHOLOGY OF ELECTROSPUN PVDF-TrFE (75:25) FIBERS**  
Sadiqa Akbar\*, Erin James. TIGER Institute, College of Engineering Technology and Computer Science. Advisor(s): Richard Mu, Joshua Adjei-Yeboah

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*\*Denotes Presenters*

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WEDNESDAY, APRIL 8, 2026

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COLLEGE OF HEALTH SCIENCES

MIXED SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

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9:00 AM	LPS-068	<b>CRITICAL ROLE OF DEFENSINS IN RESPIRATORY VIRAL INFECTION INDUCED BREAST CANCER PROGRESSION</b> Umer Ali*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Venkataswarup Tiriveedhi
9:15 AM	LPS-069	<b>DEVELOPING AN ORGANOID MODEL SYSTEM FOR PRECLAMPSIA INDUCED RENAL INJURY</b> Duraneisha Firmin*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Sarika Saraswati
9:30 AM	LPS-072	<b>sFRP2 PROMOTES CARDIAC REGENERATION BY MULTIMODAL REGULATION OF WNT, TGF-BETA AND MAP KINASE SIGNALING PATHWAYS</b> Delany Bradford*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Sarika Saraswati
9:45 AM	LPS-071	<b>IMMUNOLOGICAL IMPACTS OF OBESITY MAY CONTRIBUTE TO VIRAL SEVERITY AND COMPLICATIONS</b> Madison Hilliard*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Kimberly Cooney, Sarika Saraswati
10:00 AM	LPS-070	<b>EXPLORING GENE EXPRESSION IN EARLY CHICKEN EMBRYOS: TOTAL RNA SEQUENCING AT 24, 32, 40, AND 48 HOURS POST-INCUBATION</b> Nevein (Vaana) Soliman*, Deanthony Solomon, Sadiye Aras. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Xiaofei Wang
10:30 AM	LPS-135	<b>BIOPHYSICAL ANALYSIS OF THE ANTIMICROBIAL PEPTIDE COMBI-2 AND ITS INTERACTIONS WITH MODEL MEMBRANES</b> Jalen Mask*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Bashiyar Alamarwani, Nsoki Phambu
10:45 AM	LPS-136	<b>PENTACHLOROPHENOL INCREASES EXPRESSION OF TOLL-LIKE RECEPTOR 4 IN HUMAN IMMUNE CELLS</b> Ellie Bray*, Emerie Eddins. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen

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HYBRID SESSION

MIXED SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

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1:00 PM	EDU-039	<b>LISTENING TO THE NERVOUS SYSTEM: SOMATIC AWARENESS AS A FOUNDATION FOR SUSTAINABLE ADVOCACY</b> Jada Carter*. Psychology, College of Education. Advisor(s): Thurman Webb
1:15 PM	HS-067	<b>AN EDUCATIONAL AND TREATMENT MODEL FOR POSTURAL ORTHOSTATIC TACHYCARDIA SYNDROME (POTS) FROM A PHYSICAL THERAPY PERSPECTIVE</b> Olivia Cochran*, Audrey Foyle*, Rachel Cullison*, Lauren Terry*. Physical Therapy, College of Health Sciences. Advisor(s): Deborah Edmondson
1:30 PM	LA-134	<b>FOOD DESERTS EXIST</b> Kilyn Booker*. History Geog and Pol Science, College of Liberal Arts. Advisor(s): Ian Shapiro

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*\*Denotes Presenters*

## PRESENTATION SCHEDULES

THURSDAY, APRIL 9, 2026

### POSTER PRESENTATIONS

#### GRADUATE POSTER PRESENTATIONS, NHF - 1201 (F.I.S)

9:00 AM – 12:00 PM	AGR-001	<b>A DETERMINISTIC IMAGE BASED FRAMEWORK FOR HIGH THROUGHPUT PHENOTYPING OF SOYBEAN SEED MORPHOLOGY AND COLOR TRAITS</b> Shubh Yadav*, Upama Adhikari. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): Lyle Wallace
9:00 AM – 12:00 PM	AGR-002	<b>ASSESSING POST-WINTER PLANT ESTABLISHMENT AND GREEN COVER OF WINTER CANOLA VARIETIES IN TENNESSEE.</b> Suraj Dhakal*, Sudip B.K.. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): Jason de Koff, Matthew Carpenter
9:00 AM – 12:00 PM	AGR-006	<b>DO PEPTIDE HORMONES CONTROL EPIGENETIC REGULATION OF LEGUME-RHIZOBIA SYMBIOSIS ?</b> Hyndavi Yammanuru*. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): Sonali Roy
9:00 AM – 12:00 PM	AGR-008	<b>DOES AGRICULTURAL MANAGEMENT DRIVE SOIL HYDROPHOBICITY? INVESTIGATING THE INTERPLAY OF TILLAGE, COVER CROPS, AND ORGANIC AMENDMENTS</b> Dorcas Kayode*. Environmental Science, College of Agriculture.. Advisor(s): Felix Ogunmokun
9:00 AM – 12:00 PM	AGR-010	<b>EFFECTS OF MICROBIAL BIOSTIMULANTS ON BIOMASS PRODUCTION AND CELLULOSIC ETHANOL YIELD IN SWEET SORGHUM</b> Andrew McClarty*. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): ZaDarreayal Wiggins
9:00 AM – 12:00 PM	AGR-011	<b>EFFECTS OF MICROBIAL INOCULANTS ON RHIZOSPHERE NUTRIENT DYNAMICS AND SECONDARY METABOLITE PROFILES IN ACTAEA RACEMOSA AND HYDRASTIS CANADENSIS</b> Himani Gautam Singh*. Environmental Science, College of Agriculture.. Advisor(s): Huseyin Baris Tecimen
9:00 AM – 12:00 PM	AGR-015	<b>EXTRACTING TREE ATTRIBUTES FROM UNMANNED AERIAL VEHICLE-BORNE IMAGERY FOR URBAN AREAS</b> Manoj Burlakoti*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Bharat Pokharel, Yujuan Chen
9:00 AM – 12:00 PM	AGR-019	<b>INFLUENCE OF CITRUS PECTIN MOLECULAR WEIGHT ON PROBIOTIC GROWTH AND GUT MICROBIOTA FERMENTATION IN VITRO</b> Subir Das*, CheKenna Fletcher, Suhua Zhang. Food and Animal Science, College of Agriculture. Advisor(s): Ying Wu
9:00 AM – 12:00 PM	AGR-024	<b>INVESTIGATING DIETARY FLAVONOIDS AS NATURAL SENOLYTICS FOR HEALTHY AGING</b> Khwahish Jawariya*. Food and Animal Science, College of Agriculture. Advisor(s): Brahmaiah Pendyala

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9:00 AM – 12:00 PM	AGR-025	<b>MACHINE LEARNING-BASED HIGH-THROUGHPUT PHENOTYPING ENABLES RAPID AND ACCURATE QUANTIFICATION OF SOYBEAN ROOT NODULES</b> Kuber Shivashakarappa*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Ali Taheri
9:00 AM – 12:00 PM	AGR-027	<b>OPTIMIZING pKa BASED ORGANIC ACID COMBINATIONS FOR IMPROVED ANTIMICROBIAL EFFICACY AT NEAR NEUTRAL pH</b> Shreya Talan*. Food and Animal Science, College of Agriculture. Advisor(s): Brahmaiah Pendyala, Akhil Rautela
9:00 AM – 12:00 PM	AGR-031	<b>SMALL SPACES, BIG IMPACT: OVERLOOKED URBAN PAVEMENT CREVICES AS A FRONTIER FOR BIODIVERSITY CONSERVATION, CARBON STORAGE, AND POLLUTANT REMEDIATION</b> Matthew Manu*. Environmental Science, College of Agriculture. Advisor(s): Jianwei Li
9:00 AM – 12:00 PM	AGR-032	<b>SOIL HEALTH INDICATORS UNDER CONVENTIONAL AND CONSERVATIONAL CROPPING SYSTEMS</b> Pooja Chaudhari*, Mukesh Chaudhary. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Krishna Bhandari, Jianwei Li
9:00 AM – 12:00 PM	AGR-036	<b>ULTRAVIOLET INACTIVATION (UV-C) OF VIRAL DROPLETS ON FOOD CONTACT SURFACES: A PRELIMINARY STUDY</b> Nirmal Thirunavookarasu Sankaranarayanan*, Jestin Bose. Food and Animal Science, College of Agriculture. Advisor(s): Ankit Patras, Brahmaiah Pendyala
9:00 AM – 12:00 PM	AGR-081	<b>AGRICULTURAL CREDIT AND FARM PRODUCTIVITY IN POST-2008: AN ANALYSIS</b> Binod Bhusal*, Samjhauta Thapa. Agribusiness and Education, College of Agriculture. Advisor(s): Aditya Khanal
9:00 AM – 12:00 PM	AGR-082	<b>AUTOMATED PHENOTYPING OF MUNG BEANS FOR GROWTH RESPONSE UNDER DROUGHT</b> Josh Relyea*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Matthew Blair
9:00 AM – 12:00 PM	AGR-083	<b>CHARACTERIZATION OF YIELD-RELATED SEED TRAITS AND COLOR VARIATION IN THE SYNADAPT POPULATION BY FIELD SELECTION OF MULTIPLE GENERATIONS</b> Sumayea Khan*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Matthew Blair
9:00 AM – 12:00 PM	AGR-084	<b>COMPARISON OF BIOACTIVE COMPOUNDS AND THEIR ANTI-AGING EFFECTS IN DISTINCT BLUEBERRY CATEGORIES</b> Fnu Annu*, Yang Zhang. Food and Animal Science, College of Agriculture. Advisor(s): Hongwei Si
9:00 AM – 12:00 PM	AGR-085	<b>CONTRIBUTION OF GRASSES AND LEGUMES ROOT VS SHOOT LITTER DERIVED CARBON CONTRIBUTION ACROSS POM AND MAOM FRACTIONS OF SOIL: A GLOBAL SYSTEMATIC REVIEW</b> Bipin Rijal*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Resham Thapa
9:00 AM – 12:00 PM	AGR-086	<b>EFFECTS OF FLOODING DURATION ON CANKER DEVELOPMENT CAUSED BY DIAPORTHE ERES IN FLOWERING DOGWOOD.</b> Shahla Borzouei*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel

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9:00 AM – 12:00 PM	AGR-087	<b>FACTORS AFFECTING RESILIENCE CAPACITY OF HOUSEHOLDS IN TENNESSEE: AN EVALUATION FROM HOUSEHOLD PERCEPTIONS.</b> James Clay II*, Myles Bolton. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Lap Tran
9:00 AM – 12:00 PM	AGR-088	<b>FOOD SYSTEMS AND YOUTH: EXPLORING YOUTH SKILLS FOR AGRICULTURAL WORKFORCE</b> Anthony Garner*. Agribusiness and Education, College of Agriculture. Advisor(s): John Ricketts, Lana Petrie
9:00 AM – 12:00 PM	AGR-089	<b>GENETIC VARIABILITY AND TRAIT RELATIONSHIPS OF SEED MORPHOLOGICAL AND NUTRITIONAL TRAITS IN SOYBEAN FOR TARGETED BREEDING</b> Upama Adhikari*, Shubh Yadav. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Lyle Wallace
9:00 AM – 12:00 PM	AGR-090	<b>GREEN CONSUMPTION BEHAVIOR AND WILLINGNESS TO PAY PRICE PREMIUM FOR ORGANIC FOOD AMONG TENNESSEE RESIDENTS</b> Stinson Parks*, Santosh Kafle. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Tran, Prabodh Illukpitiya
9:00 AM – 12:00 PM	AGR-091	<b>GREEN CONSUMPTION VALUES AND THEIR INFLUENCE ON LOCAL FOOD PURCHASING DECISIONS: A CASE FROM TENNESSEE</b> Santosh Kafle*, Stinson Parks. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Lap Tran, Prabodh Illukpitiya
9:00 AM – 12:00 PM	AGR-092	<b>HIGH-PERFORMING WINTER COVER CROPS VARIETIES FROM NATIONAL TRIALS FOR MIDDLE TENNESSEE.</b> Laxmi Prasad Joshi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Matthew Blair
9:00 AM – 12:00 PM	AGR-093	<b>HOUSEHOLD COPING STRATEGIES FOR FOOD INSECURITY AND FINANCIAL CHALLENGES: A MULTI-DIMENSIONAL APPROACH</b> Myles Bolton*, James Clay II*. Agribusiness and Education, College of Agriculture. Advisor(s): Lap Tran
9:00 AM – 12:00 PM	AGR-094	<b>IDENTIFYING ADAPTED SOFT RED WINTER WHEAT VARIETIES FOR DUAL-PURPOSE USE IN TENNESSEE.</b> Hemant Kumar Sahani*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Philip Hinson
9:00 AM – 12:00 PM	AGR-095	<b>IN VITRO EVALUATION OF ENGINEERED NANOMATERIALS FOR SUPPRESION OF BOTRYOSPHERA DOTHIDEA IN EASTERN REDBUD</b> Anvesh Sankuratri*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel
9:00 AM – 12:00 PM	AGR-096	<b>LEADERSHIP AND PROFESSIONAL DEVELOPMENT NEEDS OF EXTENSION AGENTS IN TENNESSEE</b> Ifeoma Nwakoza*. Agribusiness and Education, College of Agriculture. Advisor(s): Akua Adu-Gyamfi
9:00 AM – 12:00 PM	AGR-097	<b>LETHAL AND SUB-LETHAL EFFECTS OF HERBICIDE ON GREEN LACEWINGS, CHRYSOPA OCLATA (NEUROPTERA: CHRYSOPIDAE)</b> Manju Yogi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Kaushalya Amarasekare
9:00 AM – 12:00 PM	AGR-098	<b>MANAGEMENT OF CANKER DISEASES CAUSED BY BOTRYOSPHERA DOTHIDEA AND DIAPORTHE ERES IN EASTERN REDBUD (CERCIS CANADENSIS)</b> Pratima Subedi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel, Christina Jennings

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9:00 AM – 12:00 PM	AGR-099	<b>MAPPING AND MONITORING WEED CANOPY DYNAMICS IN WINTER WHEAT USING UAV-BASED MULTISPECTRAL IMAGERY AND MACHINE LEARNING</b> Bipin Panthi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Clement Akumu
9:00 AM – 12:00 PM	AGR-100	<b>OFF-FARM WORK AS A PATHWAY TO IMPROVED DIETARY DIVERSITY AMONG FARM FAMILIES</b> Samjhauta Thapa*, Binod Bhusal. Agribusiness and Education, College of Agriculture. Advisor(s): Aditya Khanal
9:00 AM – 12:00 PM	AGR-101	<b>REARING METHODS OF DIFFERENT LIFE STAGES OF ORIUUS INSIDIOSUS (HEMIPTERA: ANTHOCORIDAE)</b> Akriti Adhikari*, Manju Yogi. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Kkaushalya Amarasekare, Matthew Carpenter
9:00 AM – 12:00 PM	AGR-103	<b>WARMING IMPACTS ON PATTERNS AND DRIVERS OF SOIL RESPIRATION IN SWITCHGRASS CROPLANDS</b> Monika Gaire*, Matthew Manu. Environmental Science, College of Agriculture. Advisor(s): Jianwei Li, Lahiru Gamage
9:00 AM – 12:00 PM	EDU-104	<b>IMPROVEMENT OR IMPOSTER: INVESTIGATING THE RELATIONSHIP BETWEEN BURNOUT AND USE OF ARTIFICIAL INTELLIGENCE IN THE WORKPLACE BY EARLY CAREER PROFESSIONALS AND STUDENTS IN PSYCHOLOGY AND COUNSELING.</b> Tayler Thomason*. Psychology, College of Education Advisor(s): Tayler Thomason, Robin Oatis-Bellew
9:00 AM – 12:00 PM	EDU-105	<b>THE WEIGHT OF SUCCESS: EXPLORING THE EVOLUTION AND DIMINISHMENT OF THE SUPERWOMAN SCHEMA AMONG BLACK WOMEN WITH ADVANCED DEGREES</b> Kiara Tookes-Williams*. Psychology, College of Education Advisor(s): Esther Lynch
9:00 AM – 12:00 PM	EDU-106	<b>UNPACKING THE LAYERS: TOXIC MASCULINITY’S INFLUENCE ON BLACK MEN’S IDENTITY DEVELOPMENT</b> Raymond Popplewell*. Psychology, College of Education Advisor(s): Brooke Rappaport
9:00 AM – 12:00 PM	EDU-107	<b>WHEN THE MIRROR DON’T LOOK LIKE YOU: THE IDENTITY FORMATION OF BLACK WOMEN RAISED IN PREDOMINANTLY WHITE NEIGHBORHOODS</b> CharMayne Jackson*. Psychology, College of Education Advisor(s): Brooke Rappaport
9:00 AM – 12:00 PM	ENGR-041	<b>AERODYNAMIC PERFORMANCE OPTIMIZATION OF A TRUSS-BRACED WING AIRCRAFT USING CFD TECHNIQUES FOR SUSTAINABLE AVIATION WITH A SOLID OXIDE FUEL CELL (SOFC) PROPULSION SYSTEM</b> Md. Mashiur Rahman*. Mechanical and Manufacturing Engineering, College of Engineering Technology and Computer Science Advisor(s): Muhammad Akbar
9:00 AM – 12:00 PM	ENGR-042	<b>COMPUTATIONAL FLUID DYNAMICS AND MAGNETOHYDRODYNAMICS MODELING OF LIQUID METAL FLOWS FOR FUSION BLANKET APPLICATIONS</b> Vailet Magidanga*. Civil and Environmental Engineering, College of Engineering Technology and Computer Science Advisor(s): Parthasarathy Ranganathan

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*\*Denotes Presenters*

9:00 AM – 12:00 PM	ENGR-043	<b>DESIGN AND CONCEPTUAL DEVELOPMENT OF A NON-CONTACT PIEZOELECTRIC THRUSTER FOR SAFER COLONOSCOPY</b> Christopher Buford II*. Computer Science, College of Engineering Technology and Computer Science Advisor(s): Erdem Erdemir
9:00 AM – 12:00 PM	ENGR-044	<b>EFFICIENT SECURE INFERENCE FOR VISION TRANSFORMERS VIA TOKEN REDUCTION AND KNOWLEDGE DISTILLATION</b> Pulock Das*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science Advisor(s): Kamrul Hasan
9:00 AM – 12:00 PM	ENGR-046	<b>FROM 1D CONFINEMENT TO 3D DISORDER: PROBING THE LIMITS OF POLARITONIC THERMAL COHERENCE</b> Tyler Sax*. TIGER Institute, College of Engineering Technology and Computer Science Advisor(s): Akira Ueda, Richard Mu
9:00 AM – 12:00 PM	ENGR-061	<b>TECHNOLOGIES FOR IMPROVING PEDESTRIAN RAILROAD GRADE CROSSINGS IN URBAN AREAS</b> Sunam Shrestha*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Deo Chimba
9:00 AM – 12:00 PM	ENGR-108	<b>CEMENT ELECTROLYTES WITH INTERCONNECTED MICROPOROUS STRUCTURES FOR CEMENT SOLID STATE BATTERIES</b> Ziyu Liu*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Shihui Liu, Lin Li
9:00 AM – 12:00 PM	ENGR-111	<b>INFLUENCE OF HEMP SHIV PARTICLE SIZE ON THE COMPRESSIVE PERFORMANCE OF MYCELIUM-BASED MATERIALS</b> Yanhai Liu*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Shihui Liu
9:00 AM – 12:00 PM	ENGR-112	<b>PERFORMANCE COMPARISON OF PHYSICS-INFORMED AND MACHINE LEARNING MODELS FOR DETECTING OPERATIONAL FAULTS IN AIR HANDLING UNITS</b> Mercy Sammy*. Civil and Environmental Engineering, College of Engineering Technology and Computer Science Advisor(s): Zufen Wang
9:00 AM – 12:00 PM	ENGR-113	<b>REUSING C&amp;D WASTE FINES FOR SUSTAINABLE SOIL IMPROVEMENT AND GROUNDWATER SAFETY</b> Fatemeh Ghiasvand*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Roger Painter
9:00 AM – 12:00 PM	ENGR-114	<b>UNIFYING MECHANO-SORPTIVE PHENOMENA IN POLYMERS: FROM ENVIRONMENTAL STRESS CRACKING TO MECHANO-SORPTIVE CREEP</b> Yue Yan*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Ranganathan Parthasarathy, Anil Misra
9:00 AM – 12:00 PM	HS-115	<b>A HOLISTIC APPROACH TO REDUCING COLON CANCER RISK THROUGH NUTRITION AND LEISURE EXERCISE</b> Eva Kilgore*, Amos Tan*, Olivia Tilton*, Jacob Watts*. Physical Therapy, College of Health Sciences Advisor(s): David Lehman
9:00 AM – 12:00 PM	HS-116	<b>CRITERIA FOR INTEGRATION OF HIGH-SPEED TRAINING AS REHABILITATION TO REDUCE REINJURY FOLLOWING HAMSTRING STRAIN INJURY IN PROFESSIONAL ATHLETES: A SYSTEMATIC REVIEW.</b> Jahari Bell*, David Edgren*, Adam Pleasants*. Physical Therapy, College of Health Sciences Advisor(s): Richad Clark

*\*Denotes Presenters*

9:00 AM – 12:00 PM	LPS-117	<b>THE ROLE OF IMMUNE CELLS AND FIBROBLAST IN MOUSE MYOCARDIAL INFARCTED MODULE: DYNAMICS OF INFLAMMATION AND TISSUE REPAIR</b> Cecilia Koko*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Cooney Kimberly, Saraswati Sarika
9:00 AM – 12:00 PM	LPS-118	<b>ESTIMATION OF GENETIC PARAMETERS FOR PARASITE RESISTANCE AND GENOME-WIDE IDENTIFICATION OF RUNS OF HOMOZYGOSITY ISLANDS IN FLORIDA CRACKER SHEEP</b> Rafeq Jambi*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Rafeq Jambi, Xiaofei Wang
9:00 AM – 12:00 PM	LPS-119	<b>IMPACT OF PRECIPITATION VARIABILITY ON SWITCHGRASS GROWTH AND PRODUCTIVITY</b> Jaekedah Christian*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Dafeng Hui
9:00 AM – 12:00 PM	LPS-120	<b>RSK1/2 PROMOTES AN INFLAMMATORY MICROENVIRONMENT IN TRIPLE NEGATIVE BREAST CANCER</b> Jayla Moore*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Venkataswarup Tiriveedhi, Deborah Lannigan
9:00 AM – 12:00 PM	LPS-121	<b>TOLL-LIKE RECEPTOR (TLR) 2, TLR3, TLR4, AND TLR8 IN THE MECHANISM OF HEXABROMOCYCLODODECANE-INDUCED PRODUCTION OF IL-1B</b> Wenjun Zhu*, Zinia Hunter, Brian Townsend. Chemistry, College of Life and Physical Sciences Advisor(s): Margaret Whalen
9:00 AM – 12:00 PM	LPS-122	<b>VITAMIN C SUPPLEMENTS INTAKE EFFECT ON DNA METHYLATION AND GENE REGULATION</b> Sadiye Aras*, Jiajun Shi, Shuai Xu. Biological Sciences, College of Life and Physical Sciences Advisor(s): Xiaofei Wang, Qiuyin Cai

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

THURSDAY, APRIL 9, 2026

### POSTER PRESENTATIONS

#### UNDERGRADUATE POSTER PRESENTATIONS, NHF - 1201 (F.I.S)

1:00 PM – 4:00 PM	AGR-144	<b>ASSESSING FOREST DIVERSITY AT PLOT AND LANDSCAPE SCALES IN LAND BETWEEN THE LAKES USING FIELD DATA AND TREEMAP 2022</b> Destini Wright*. Environmental Science, College of Agriculture. Advisor(s): Bharat Pokharel, Xiaoyu Xu
1:00 PM – 4:00 PM	AGR-146	<b>EVALUATION OF SUBSTRATES ON YIELD AND PROFITABILITY OF ORGANIC MICROGREENS GROWN UNDER CONTROLLED ENVIRONMENTAL CONDITIONS</b> Elana Bodude*, Sai Prakash Naraju. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Dilip Nandwani
1:00 PM – 4:00 PM	AGR-147	<b>IMPACT OF 4-H IN TENNESSEE: STRATEGIES FOR REINTRODUCTION IN URBAN COUNTIES</b> Olivia Whitmore*. Human Sciences, College of Agriculture. Advisor(s): LaPorsha Davis
1:00 PM – 4:00 PM	AGR-148	<b>REPRODUCTIVE PERFORMANCE OF MYOTONIC-SIRED F1 DOES COMPARED TO KIKO AND SPANISH DOES</b> Sierra Richmond*, Jai'Da Seafous*, Julian Harding*. Food and Animal Science, College of Agriculture. Advisor(s): Richard Browning, Emily Hayes
1:00 PM – 4:00 PM	AGR-149	<b>THE ROLE OF ACCREDITATION IN FOSTERING POSITIVE SOCIAL-EMOTIONAL DEVELOPMENT: A QUALITATIVE STUDY</b> Kristian Butler*. Human Sciences, College of Agriculture. Advisor(s): LaPorchia Davis, Margaret Machara
1:00 PM – 4:00 PM	AGR-150	<b>UNDERSTANDING THE ROLE OF LRR-RLK GENES IN LEGUME ROOT NODULATION VIA PROMOTER ANALYSIS AND HAIRY ROOT TRANSFORMATION</b> Miracle walker*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Sonali Roy, Rajni Parmar
1:00 PM – 4:00 PM	AGR-151	<b>UPCYCLED FOOD AWARENESS AND CONSUMER PERCEPTION: A STUDY OF TENNESSEE CONSUMERS</b> Olivia Giannuzzi*. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Tran
1:00 PM – 4:00 PM	EDU-152	<b>BURNOUT ZONES AND PROFESSIONAL EFFECTIVENESS: A REVIEW OF STRESS AND RECOVERY IN HELPING PROFESSIONS</b> Daelyn Lyons*, Dorien Brown*, Eliana Alford*, Madisson Dixon*, Paige Chuma*, Maylyn Mann *. Psychology, College of Education. Advisor(s): Thurman Webb
1:00 PM – 4:00 PM	ENGR-153	<b>MAGNETO-OPTICAL EFFECT OF BISMUTH FERRITE AND ITS MEASUREMENTS</b> India Gooch*. TIGER Institute, College of Engineering Technology and Computer Science. Advisor(s): Akira Ueda
1:00 PM – 4:00 PM	ENGR-167	<b>ENERGY EXASCALE EARTH SYSTEM MODEL (E3SM) FOR HIGH-RESOLUTION PREDICTION OF HURRICANE-INDUCED HYDROLOGICAL RISKS IN THE APPALACHIAN REGION</b> Hailey Hunt*. Center of Excellence - Information Systems and Engineering Management, Research and Sponsored Programs. Advisor(s): Amber Spears, Peter Thornton

1:00 PM – 4:00 PM	HS-154	<b>ISOKINETIC STRENGTH COMPARISON BETWEEN HEALTHY AND POST-ACL RECONSTRUCTION LEGS IN COLLEGIATE ATHLETES</b> Kierra Washington*. Human Performance and Sports Science, College of Health Sciences. Advisor(s): Sarah Martinez-Sepanski, Poliala Dickson, Robbie Cochrum, Jason Smith
1:00 PM – 4:00 PM	HS-155	<b>STRENGTHENING DATA GOVERNANCE: ADDRESSING HIDDEN ERRORS IN TENNESSEE'S MEDICAID ELIGIBILITY RECORDS FOR ROBUST PUBLIC HEALTH REPORTING</b> Jennifer Barlow*. Public Health, Health Administration, and Health Sciences, College of Health Sciences. Advisor(s): Krystal Massey
1:00 PM – 4:00 PM	HS-156	<b>THERAPEUTIC INTERVENTION FOLLOWING A NAVICULAR FRACTURE IN A COLLEGIATE FOOTBALL PLAYER</b> Aliyah Moore*. Human Performance and Sports Science, College of Health Sciences. Advisor(s): Poliala Dickson, Sarah Martinez-Sepanski, Robbie Cochrum, Jason Smith
1:00 PM – 4:00 PM	LPS-157	<b>METAL-ORGANIC FRAMEWORKS: SYNTHESIS OF PORUS MATERIALS AND SEPARATION OF RARE EARTH METALS</b> Janasica Joyner*. Chemistry, College of Life and Physical Sciences. Advisor(s): Dr. Tasneem Siddiquee
1:00 PM – 4:00 PM	LPS-158	<b>1 SOL-GEL METHOD-BASED BISMUTH FERRITE (BiFeO<sub>3</sub>) SYNTHESIS</b> Taryah Burrell*. Chemistry, College of Life and Physical Sciences. Advisor(s): Mulugeta Wayu, Richard Mu
1:00 PM – 4:00 PM	LPS-159	<b>ALCOHOL INDUCED LUNG INJURY WITH POTENTIAL CARCINOGENIC</b> Kimora Utai*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Dr. Jamie Sturgill, Cheyenne Chandler, Emily Huffman
1:00 PM – 4:00 PM	LPS-160	<b>COLLECTION AND ISOLATION OF THERMOPHILIC MICROORGANISMS FOR WASTE VALORIZATION</b> Sadiqa Akbar*, Shannon Jeffries, Keyon'dre Boyd, Ma'Kyah Washington. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Joshua OHair
1:00 PM – 4:00 PM	LPS-161	<b>EFFECT OF PENTACHLOROPHENOL EXPOSURES ON EXPRESSION OF THE INTRACELLULAR TOLL-LIKE RECEPTORS 3 AND 8 IN HUMAN IMMUNE</b> Emerie Eddins*, Ellie Bray. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen
1:00 PM – 4:00 PM	LPS-162	<b>EFFECTS OF TRIBUTYLTIN ON EXPRESSION OF TOLL-LIKE RECEPTOR (TLR) RNA IN HUMAN IMMUNE CELLS</b> Janeli Centeno*. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen, April Falconer-Turner
1:00 PM – 4:00 PM	LPS-163	<b>HEXABROMOCYCLODODECANE-INDUCED STIMULATION OF IL-6 PRODUCTION BY HUMAN IMMUNE CELLS RELIES ON MyD88</b> Brian Townsend*, Ellie Bray. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen
1:00 PM – 4:00 PM	LPS-164	<b>HYDROTHERMAL SYNTHESIS AND CHARACTERIZATION OF BISMUTH FERRITE (BiFeO<sub>3</sub>) NANOSTRUCTURES</b> Destiny Curtis*. Chemistry, College of Life and Physical Sciences. Advisor(s): Mulugeta Wayu
1:00 PM – 4:00 PM	LPS-165	<b>STUDY OF THE PHYSICAL (IN)STABILITY OF MELANIN-LIKE MATERIALS</b> Tylor Miller*. Chemistry, College of Life and Physical Sciences. Advisor(s): Koen Vercruyssen, Margaret Whalen

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1:00 PM – LPS-166  
4:00 PM

**TRIBUTYLTIN-INDUCED INCREASES IN TOLL-LIKE RECEPTOR  
EXPRESSION IN HUMAN IMMUNE CELLS**

Cameron Bennett\*, Ellie Bray. Chemistry, College of Life and Physical Sciences.  
Advisor(s): Margaret Whalen

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## PRESENTATION SCHEDULES

THURSDAY, APRIL 9, 2026

### FACULTY PRESENTATIONS

#### ORAL PRESENTATIONS - RSP 163

12:00 PM	FAC-01	<b>INTEGRATED RESEARCH TO PROMOTE PRODUCTION OF NUTRIENT-ENRICHED AND STRESS-TOLERANT TOMATOES</b> Dr. Suping Zhou, Agricultural Sciences and Engineering, College of Agriculture. Sudhakar Madhavarapu, Agricultural and Environmental Sciences, College of Agriculture. Jing Zhou, Agricultural and Environmental Sciences, College of Agriculture. Katrina Seaman, Agricultural and Environmental Sciences, College of Agriculture.
12:20 PM	FAC-02	<b>WHEN APR MEETS NIL: HOW 'NEUTRAL' METRICS DEEPEN STRUCTURAL INEQUITIES FOR HBCU ATHLETICS</b> Mr. Rolando Shannon, Educational Administration, College of Education .
12:40 PM	FAC-03	<b>EFFECTIVENESS OF AI FOR HIGHER EDUCATION: TEACHING, LEARNING, RESEARCH</b> Dr. Robbie Melton, SMART Center, SMART Innovative Technologies Division.
1:00 PM	FAC-04	<b>OPPORTUNITIES FOR EDUCATION, RESEARCH, AND WORKFORCE DEVELOPMENT IN CRITICAL MINERALS FOR NATIONAL RESILIENCE</b> Dr. Amber Spears, Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Dr. Lin Li, Civil and Architectural Engineering, College of Engineering. Dr. Deo Chimba, Civil and Architectural Engineering, College of Engineering. . Dr. Kate Brown Requist, Civil and Architectural Engineering, College of Engineering. Dr. Junke Zhang, Civil and Architectural Engineering, College of Engineering.
1:20 PM	FAC-05	<b>ANDROGENESIS AND IN VITRO MATURATION OF SWEET SORGHUM MICROSPORES PER TRANSFORMATION AS NATURAL PROTOPLASTS</b> Dr. Ahmad Aziz, Agricultural Sciences and Engineering, College of Agriculture.
1:40 PM	FAC-06	<b>EXAMINING IMPACTS OF AGRITOURISM IN TENNESSEE: RIPPLE EFFECTS OF FARMS TO REGIONS</b> Dr. Aditya Khanal, Agribusiness and Education, College of Agriculture. Mr. Purushottam Dhungana, Tennessee State University (Former Research Assistant and Graduate Student).
2:00 PM	FAC-07	<b>CARDIOPULMONARY HEALTH DISPARITIES AMONG RACIAL AND ETHNIC MINORITIES IN THE UNITED STATES</b> Dr. Phidomise Leveque, Cardiorespiratory Care Science, College of Health Sciences .
2:20 PM	FAC-08	<b>SPACELIFE OCCURS IN SPACE, NOT ON OR BELOW THE SURFACE OF PLANETS, MOONS, OR ASTEROIDS.</b> Dr. Geoffrey Burks, Physics and Mathematics, College of Life and Physical Sciences .
2:40 PM	FAC-09	<b>IDENTIFICATION AND MANAGEMENT OF FUSARIUM WILT WITH NOVEL ISOLATES ENDOPHYTES IN SWEET CORN</b> Dr. Christine Ondzighi-Assoume, Agricultural Sciences and Engineering, College of Agriculture. Dr. Margaret Mmbaga, Agricultural and Environmental Sciences, College of Agriculture. Mr. Mustapha Olawuni, Agricultural and Environmental Sciences, College of Agriculture.

3:00 PM	FAC-10	<p><b>VITAMIN C SUPPLEMENTS INTAKE EFFECT ON DNA METHYLATION AND GENE REGULATION</b></p> <p>Dr. Sadiye Aras, Biological Sciences, College of Life and Physical Sciences. Dr. Jiajun Shi, Vanderbilt University Medical Center. Dr. Shuai Xu, Vanderbilt University Medical Center. Dr. Jie Wu, Vanderbilt University Medical Center. Dr. Xiaofei Wang, Biological Sciences, College of Life and Physical Science.</p>
3:20 PM	FAC-11	<p><b>THE ROLE OF MINERALOGY IMPACTING THE MECHANOCHEMICAL DESTRUCTION OF PFOA</b></p> <p>Dr. Junke Zhang, Civil and Environmental Engineering, College of Engineering Technology and Computer Science. Dr. Lin Li, Civil and Architectural Engineering, College of Engineering.</p>
3:40 PM	FAC-12	<p><b>ELU42 PROMOTES REGENERATIVE TISSUE REPAIR VIA STEM CELL RECRUITMENT AND WNT PATHWAY MODULATION</b></p> <p>Dr. Jerel Crew, Biological Sciences, College of Life and Physical Sciences . Dr. Sarika Saraswati, Biological Sciences, College of Life and Physical Science.</p>
4:00 PM	FAC-13	<p><b>ULTRAVIOLET GERMICIDAL IRRADIATION FOR INACTIVATION OF AEROSOLIZED MICROORGANISMS: EXPERIMENTAL EVALUATION AND CFD-BASED UV DOSE ANALYSIS</b></p> <p>Dr. Housyn Mahmoud, Food and Animal Science, College of Agriculture. Dr. Housyn Mahmoud, , College of Agriculture. Dr. Housyn Mahmoud, Agricultural and Environmental Sciences, College of Agriculture.</p>

## PRESENTATION SCHEDULES

THURSDAY, APRIL 9, 2026

### FACULTY PRESENTATIONS

#### POSTER PRESENTATIONS - NEW HOUSING FACILITY, 1201 (F.I.S)

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9:00 AM - 4:00 PM	FAC-14	<b>EFFICACY OF FUNGICIDES AND BIOFUNGICIDES AGAINST VASCULAR STREAK DIEBACK IN EASTERN REDBUD (<i>CERCIS CANADENSIS</i>)</b> Cansu Oksel, Agricultural Science and Engineering, College of Agriculture. Fulya Baysal-Gurel, College of Agriculture. Terri Simmons, College of Agriculture. Mahesh Adhikari, College of Agriculture. Sneha Patil, College of Agriculture.
9:00 AM - 4:00 PM	FAC-15	<b>CAN ORGANOPHOSPHATE-REPLACEMENT AND REDUCED-RISK INSECTICIDES NEGATIVELY AFFECT THE NATURAL ENEMY ORIUS INSIDIOSUS (HEMIPTERA: ANTHOCORIDAE)?</b> Dr. Kaushalya Amarasekare, Agricultural Sciences and Engineering, College of Agriculture. Ms. Uzoamaka Abana, , Tennessee State University.
9:00 AM - 4:00 PM	FAC-16	<b>DIVERGENT RESPONSES OF CROP YIELD AND SOIL NITROUS OXIDE EMISSIONS TO PRECIPITATION CHANGES</b> Dr. Dafeng Hui, Biological Sciences, College of Life and Physical Sciences . Jaekedah Christian, Biological Sciences, College of Life and Physical Science. Avedananda Ray, Biological Sciences, College of Life and Physical Science. Faisal Hayat, Biological Sciences, College of Life and Physical Science. Dr. Resham Thapa, Cooperative Extension, College of Agriculture.
9:00 AM - 4:00 PM	FAC-17	<b>OCCURRENCE AND DISTRIBUTION OF ANTIBIOTIC RESISTANCE GENES (ARGs) IN CULTIVATED LETTUCE (<i>LACTUCA SATIVA</i> 'COASTAL STAR') AND ASSOCIATED ENVIRONMENTAL MATRICES</b> Dr. Agnes Kilonzo-Nthenge, Food and Animal Science, College of Agriculture.
9:00 AM - 4:00 PM	FAC-18	<b>DRONE-BASED AGROPHENOTYPING OF AMARANTH: ADVANCING NON-INVASIVE MONITORING OF PHENOLOGICAL DEVELOPMENT AND BIOMASS DYNAMICS</b> Dr. Svitlana Lymanska, Agricultural Sciences and Engineering, College of Agriculture. Dr. Matthew Blair, Agricultural Sciences and Environmental, College of Agriculture.
9:00 AM - 4:00 PM	FAC-19	<b>NUTRITIONAL EPIGENETICS OF VITAMIN INTAKE (B1, B2, B3, B6, AND E): ASSOCIATIONS WITH GENOME-WIDE DNA METHYLATION AND GENE REGULATION</b> Dr. Sadiye Aras, Biological Sciences, College of Life and Physical Sciences . Dr. Jiajun Shi Jiajun Shi, Vanderbilt University Medical Center. Dr. Shuai Xu Shuai Xu, , Vanderbilt University Medical Center. Dr. Xiaofei Wang Xiaofei Wang, Biological Sciences, College of Life and Physical Science. Vanderbilt University Medical CenterDr. Qiuyin Cai Qiuyin Cai, , Vanderbilt University Medical Center.
9:00 AM - 4:00 PM	FAC-20	<b>FROM RACIAL STRESS TO ACADEMIC RESILIENCE: THE ROLE OF COPING AND IDENTITY DEVELOPMENT AMONG BLACK COLLEGE STUDENTS</b> Dr. Richard Garvin, Psychology, College of Education . Mr. Leonardo Martinez-Torres, Tennessee State University.

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